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WESTERN DISTRICT OF LOUISIANA
LAFAYETTE, LOUISIANA

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF LOUISIANA
LAFAYETTE DIVISION

DELTA TOWING LLC

CIVIL ACTION NO. 6:08CV0075

VERSUS

JUDGE REBECCA F. DOHERTY

BASIC ENERGY SERVICES

MAGISTRATE JUDGE HILL

RULING

After due consideration of the facts and evidence, presented by the parties at the trial of this matter through witnesses, exhibits and deposition testimony, and having had the opportunity to assess the demeanor of the witnesses, and review and weigh the evidence, this Court hereby finds and holds that it was established by a preponderance of the evidence that plaintiff in limitation, Delta Towing L.L.C. ("Delta"), is entitled to limitation of liability, and within that context, Delta is liable unto claimant, Basic Energy Services ("Basic"), in the full amount recoverable within the limitation proceeding, together with prejudgment interest from January 3, 2008 until paid, at the current rate provided for in 28 U.S.C. § 1961, due to Delta's negligence and the resulting damages to Basic's property.

I. Factual Background

On January 2, 2008, two tugboats owned by Delta, the M/V DELTA OWL and the M/V DELTA MALLARD, set off for the South Florence Canal in Vermillion Parish, in order to undertake the tow of a barge owned by Basic, namely, the Barge Rig 14. Basic had retained the services of Delta to tow its barge from the South Florence Canal to Sabine Lake in Cameron Parish. Rig 14 had just completed a job in the South Florence Canal, and was on its way to a new job in Sabine Lake for Completion Specialists. The DELTA OWL was the lead tug, pulling the tow, and Captain Amos

Gauthier was in charge.

Delta's safety requirements required Captain Gauthier to complete a "Pre-Tow Safety Questionnaire" prior to setting off. [Ex. 2, p.31] The questionnaire required the captain to evaluate the planned route for hazards (including bridges), list the dimensions of the tow, and identify all hazards expected during the voyage.¹ Captain Gauthier knew he was required to fill out the pre-tow questionnaire, but failed to do so.

At 1:30 a.m. the following day (*i.e.* January 3), while the tow was proceeding under the Ellender Bridge, Barge Rig 14 struck the Ellender Bridge, pulling the mast out of position and resulting in significant damage to the derrick, the rig and its equipment. Rig 14 was thereafter towed to Superior Derrick Services' ("Superior") shipyard in the Port of Iberia for a full assessment of the damages sustained. Basic's Rig 15 was substituted for Rig 14 and performed the job in Sabine Lake for Completion Specialists.

All parties agree the racking board contacted the bridge; it is unknown whether any other portion of the derrick made contact with the bridge.² Approximately fifteen minutes prior to the allision, Captain Gauthier had turned the controls over to an apprentice mate, Adrien Faircloth, so that he (Captain Gauthier) could go to his cabin and rest. The apprentice mate's license did not permit him to operate the tug while towing the rig, unless the captain was on the bridge.

Basic asserts the allision was caused by the following acts of negligence: (1) Captain

¹The questionnaire specifically requires the captain to identify the location and height of all bridges likely to be encountered during the voyage.

²Delta's expert witness, Ralph Busse, testified the only portion of the rig to make contact with the bridge was the racking board. However, Mr. Busse did not conduct an accident reconstruction (nor did any other witness or party), and he was unable to support his assumption at trial. No witness was called at trial who was a witness to the allision.

Gauthier's failure to fill out the pre-tow questionnaire³, (2) Delta's failure to have a system in place to enforce its requirement that the pre-tow questionnaire form be filled out prior to undertaking a tow, (3) Delta's failure to provide a competent crew for the M/V DELTA OWL, such that: (a) Captain Gauthier would be required to work longer than the maximum number of work hours allowed by the Coast Guard regulations⁴, or (b) Captain Gauthier would have to allow an unlicensed, apprentice mate to take control of the vessel. Delta admits the cause of the allision was Captain Gauthier's failure to complete the pre-tow questionnaire and/or calculate the clearance under the Ellender bridge, but denies it had privity or knowledge of this failure, arguing it had adequately impressed upon its captains the requirement that they complete the pre-tow questionnaire prior to undertaking a tow. Delta further argues any failure to provide a competent crew did not causally contribute to the allision in any manner.

Trial of this matter was bifurcated into two phases: Phase I addressed limitation of liability, Phase II addressed damages.

II. Phase I Trial Stipulations

For purposes of Phase I of the trial, the parties stipulated to the following:

1. Captain Gauthier of the Delta Owl did not complete a Pre-Tow Questionnaire prior to undertaking the tow of Rig No. 14.
2. Delta management was at fault for having a mate with an apprentice license at the wheel of the Delta Owl while towing 24 hours a day, in violation of 46

³The parties agree had Captain Gauthier properly executed the pre-tow questionnaire - or merely calculated the clearance under the bridge, even without executing the pre-tow questionnaire - he would have realized he had insufficient clearance to pass under the Ellender bridge. Accordingly, he would have called ahead to the Ellender bridge to ask that it be raised, so that the tow could safely pass. [Gauthier, p.75]

⁴See 46 U.S.C. § 8104(c)

USC 8904(a); however, it is disputed whether this fault was a cause of the allision.

3. At the time of the allision the values of Delta vessels were:

<i>Delta Owl</i>	\$300,000
<i>Delta Mallard</i>	\$300,000
<i>Delta Cruiser</i>	\$250,000

4. The freight pending for the three Delta vessels at the time of the allision was \$16,496.
5. Delta has the burden of proof to show that its management was not in privity of the fault(s) that caused the allision.

[Doc. 54]

III. Applicable Law

This matter comes before the Court by way of admiralty jurisdiction and a limitation of liability proceeding, within which Basic brings a claim of maritime negligence against Delta.

A. Limitation of Liability

As a general matter, the liability of a vessel owner for a property damage claim arising out of an allision shall not exceed the value of the vessel and pending freight, if the negligent act causing the allision occurred without the vessel owner's privity or knowledge. 46 U.S.C. § 30505. "Privity or knowledge,' sometimes described as 'complicity in the fault,' extends beyond actual knowledge to knowledge that the ship owner would have obtained by reasonable investigation." In re Signal Intern., LLC, 579 F.3d 478, 496 (5th Cir. 2009)(quoting Cupit v. McClanahan Contractors, Inc., 1 F.3d 346, 348 (5th Cir. 1993)). "If the owner is chargeable with privity or knowledge, he may not limit." Coleman v. Jahncke Service, Inc., 341 F.2d 956, 957 (5th Cir. 1965).

"Once a claimant proves that negligence . . . caused an accident, an owner seeking limitation

must show it lacked privity or knowledge of the condition.” Petition of Kristie Leigh Enterprises, Inc., 72 F.3d 479, 481 (5th Cir. 1996)(citing Cupit v. McClanahan Contractors, Inc., 1 F.3d 346, 348 (5th Cir. 1993)); *see also* Coleman at 958 (Petitioner in limitation bears burden of proving lack of privity or knowledge; the burden of proving negligence lies with the claimants). Stated otherwise, the determination of whether a shipowner is entitled to limitation employs a two-step process: first, the court must determine what acts of negligence (or conditions of unseaworthiness)⁵ caused the accident; second, the court must determine whether the shipowner had knowledge or privity of those same acts of negligence or conditions of unseaworthiness. *See e.g.* Farrell Lines Inc. v. Jones, 530 F.2d 7, 10 (5th Cir. 1976); Signal at 499; Empresa Lineas Maritimas Argentinas S.A. v. U.S., 730 F.2d 153, 155 (5th Cir. 1984). A vessel owner’s “burden to prove lack of privity or knowledge only arises when . . . [the claimant] has shown unseaworthiness [or negligence] was the proximate cause of the loss.” Signal at 499. Thus, whether or not the vessel owner had knowledge of other acts of negligence is immaterial. Id. at 500; *see also* Farrell at 10 (“Knowledge or privity of any fact or act causing the accident is not enough for denial of limitation; it is only knowledge or privity of negligent acts or unseaworthy conditions which trigger a denial of limitation.”). To preclude limitation, a shipowner’s knowledge need not be actual; rather, he is charged with knowledge of acts or events that could have been discovered through reasonable diligence. Empresa Lines at 155. A corporate owner is charged with the knowledge of its managing agents who have authority over the sphere of activities in question.⁶ Kristie Leigh at 481.

⁵Unseaworthiness is not at issue in this matter.

⁶In this matter, neither party argued Captain Gauthier occupied a high enough position in Delta’s organization, such that Gauthier’s negligence is imputed to Delta.

B. Maritime Negligence

“To establish maritime negligence, a plaintiff must ‘demonstrate that there was a duty owed by the defendant to the plaintiff, breach of that duty, injury sustained by [the] plaintiff, and a causal connection between the defendant's conduct and the plaintiff's injury.’” Canal Barge co., Inc. v. Torco Oil Co., 220 F.3d 370, 376 (5th Cir. 2000)(alterations in original)(quoting In re Cooper/T. Smith, 929 F.2d 1073, 1077 (5th Cir.1991)). “Whether a defendant owes a plaintiff a legal duty is a question of law.”⁷ Id. (internal quotation marks omitted). In maritime collision cases, “fault which produces liability must be a contributory and proximate cause of the collision, and not merely fault in the abstract.” Inter-Cities Nav. Corp. v. U.S., 608 F.2d 1079, 1081 (5th Cir. 1979). “To give rise to liability, a culpable act or omission must have been ‘a substantial and material factor in causing the collision.’” American River Transp. Co. v. Kavo Kaliakra SS, 148 F.3d 446, 450 (5th Cir. 1998)(quoting Inter Cities at 1081). “But-for” causation is insufficient, in and of itself, to give rise to liability. Id. Basic additionally argues application of certain Rules of Admiralty, specifically, the Pennsylvania and Oregon Rules.

1. The Pennsylvania Rule

The Pennsylvania rule is “a presumption in admiralty law that a statutory violation by a party to a collision is a cause of the damage unless it is established that the violation could not have caused or contributed to the collision.” American River Trans. Co. v. Kavo Kaliakra SS, 148 F.3d 446, 449 (5th Cir. 1998)(citing The Steamship Pennsylvania v. Troop, 86 U.S. 125 (1873)). The rule states:

⁷ “[T]he determination of whether a party owes a duty to another depends on a variety of factors, most notably the foreseeability of the harm suffered by the complaining party.” Canal Barge at 377 (internal quotation marks omitted). Additionally, duty “is measured by the scope of the risk that negligent conduct foreseeably entails.” Id. (internal quotation marks omitted).

[W]hen . . . a ship at the time of a collision is in actual violation of a statutory rule intended to prevent collisions, it is no more than a reasonable presumption that the fault, if not the sole cause, was at least a contributory cause of the disaster. In such a case the burden rests upon the ship of showing not merely that her fault might not have been one of the causes, or that it probably was not, but that it could not have been.

The Pennsylvania at 136.⁸ The rule addresses burden of proof; it is not a rule of ultimate liability. American River at 449; Penzoil Producing Co. v. Offshore Exp., Inc., 943 F.2d 1465, 1472 (5th Cir. 1991). As the Fifth Circuit has explained, “the Supreme Court in The Pennsylvania ‘did not intend to establish a hard and fast rule that every vessel guilty of a statutory fault has the burden of establishing that its fault could not by any stretch of the imagination have had any causal relation to the collision, no matter how speculative, improbable or remote.’” Id. (citing Compania De Maderas De Caibarien, S.A. v. Queenston Heights, 220 F.2d 120, 122-23 (5th Cir. 1955)).

2. The Oregon Rule

“The rule of The Oregon creates a presumption of fault that shifts the burden of production and persuasion to a moving vessel who, under her own power, allides with a stationary object.” Combo Maritime, Inc. v. U.S. United Bulk Terminal, LLC, 615 F.3d 599, 604 (5th Cir. 2010). The presumption “is closely related to the doctrine of *res ipsa loquitur* which creates a rebuttable presumption of fault on the part of the person controlling the instrumentality.” Id. at 604-05. The presumption shifts the burden of production and persuasion on the issue of fault. Id. It is an evidentiary presumption, designed to fill a vacuum. Id. However, once evidence is presented, the

⁸ Although the Pennsylvania rule originally applied only to collisions between ships, it has been extended by the Fifth Circuit to apply to a variety of maritime accidents and to parties other than vessels. Penzoil at 1472. See also Florida East Coast Ry. Co. v. Revilo Corp., 637 F.2d 1060, 1066 (5th Cir. 1981)(“We hold that the Pennsylvania rule may be applied to bridge/vessel allisions.”); Complaint of Magnolia Towing Co., Inc., 764 F.2d 1134 (5th Cir. 1985)(involving application of the Pennsylvania rule to allision between tug and bridge).

presumption becomes “superfluous because the parties have introduced evidence to dispel the mysteries that gave rise to the presumptions.” *Id.* (internal quotation marks omitted). Furthermore, the presumption “must be properly confined to the issue of breach only - not causation.” *Id.* (internal quotation marks omitted). ““Application of [one of these presumptions] does not supplant the general negligence determination which requires a plaintiff to prove the elements of duty, breach, causation and injury by a preponderance of the evidence.”” *Id.* (quoting City of Chicago v. M/V Morgan, 375 F.3d 563, 572-73 (7th Cir. 2004)(alterations in original).

IV. Analysis

A. Negligence of Captain Gauthier

Delta admits the cause of the allision was Captain Gauthier’s failure to complete the pre-tow questionnaire and/or properly calculate the clearance under the Ellender bridge. However, the Court finds Delta did not have privity or knowledge of the captain’s failure to fill out the pre-tow questionnaire, nor of his failure to properly calculate the clearance under the Ellender bridge. Delta adequately impressed upon its captains the requirement that they complete the pre-tow questionnaire prior to undertaking a tow. Delta had in place a Safety Management System that required the captain to plan the voyage route prior to undertaking a tow, which included a requirement that the captain determine the clearance under all overhead obstructions. [LeBlanc, 9-7-10; Gauthier, pp.39, 43, 46] Further, Delta had in place a system to monitor whether or not its crews were in compliance with the requirements of the Safety Management System. [LeBlanc, 9-7-10; Gauthier, pp. 44-45] *See e.g. Farrell Lines Inc. v. Jones*, 530 F.2d 7, 11 (5th Cir. 1976).

At trial, Delta showed Captain Gauthier had been a competent and prudent mariner, with no previous violations of Delta’s rules and regulations. Delta additionally showed there had been no

incidents of a similar nature for the year preceeding this accident on the M/V DELTA OWL or the M/V DELTA MALLARD. [LeBlanc 9-7-10] Captain Gauthier, by deposition, testified he had never been involved in any other incident where a tow struck a bridge. [Gauthier, p.55] Delta further showed there were no prior incidents which would have given rise to a concern on the part of Delta that any of its captains were failing to calculate overhead obstructions prior to undertaking voyages. Thus, the Court finds Captain Gauthier's failure to execute the pre-tow questionnaire prior to undertaking the voyage at issue was not within the privity and knowledge of Delta.

B. Whether Delta Had an Adequate Safety System in Place

At the time of the allision, Delta had in place a Safety Management System, certified through the International Safety Management code, which is regulated by the American Bureau of Shipping. The safety program included regular inspections of all vessels in Delta's fleet, periodic reviews of all documents on each vessel, a review of various logs to ensure compliance with Coast Guard regulations, routine safety meetings, including meetings where the topic was "Voyage Planning / Pre Tow Questionnaire (Overhead and Draft Clearance, Obscured Visibility)."⁹ [See e.g. Doc. 52, Ex. 8, No. 44; LeBlanc 9-7-10; Doc. 52, Ex. 23, pp. 17-20] As previously noted, Delta's Safety Management System required the captain to complete a pre-tow questionnaire prior to undertaking a tow. The questionnaire required the captain to plan the voyage route and determine the clearance under all anticipated overhead obstructions. [Doc. 52, Ex. 2, p.32] The questionnaire was printed on carbon copy paper, and one copy was to remain on the tug, while the other copy was to be turned

⁹A pre-tow questionnaire is not mandated by a Coast Guard regulation, or the International Safety Management Code. Rather, it was a form mandated by Delta's Safety Management System. ; 33 C.F.R. §§ 96.100, *et seq.*; see also LeBlanc, 9-7-10.

in to management at crew change.¹⁰ The pre-tow questionnaire is discussed in Manual III (“Towing Operations & Maintenance”) of Delta’s Safety Management System. [Ex. 23, p.20] The pre-tow questionnaire was also discussed at weekly safety meetings. [LeBlanc 9-7-10] Management additionally would check for compliance with the foregoing requirements during its routine inspections. If the required paperwork was not completed, or was incorrectly completed, further action would be taken, including additional training addressing how to properly complete the paperwork, a reprimand, termination, etc.¹¹ [LeBlanc 9-7-10] *See e.g. Farrell Lines Inc. v. Jones*, 530 F.2d 7, 11 (5th Cir. 1976). Accordingly, the Court finds Delta had an adequate safety system in place, such that any failure on the part of Captain Gauthier to execute the pre-tow questionnaire in this instance was not within the privity and/or knowledge of Delta.

C. Whether Delta was negligent in allowing an unlicensed mate take control

The Court finds the fact that Mr. Faircloth, an apprentice mate, was at the wheel at the time of the allision was not a proximate cause of the allision.¹² Thus, whether or not Delta had actual or constructive knowledge of this fact is immaterial. *See Signal* at 500. The testimony at trial was that it is the captain of the lead tug who is responsible for filling out the pre-tow questionnaire - not the mate. [LeBlanc 9-7-10; Ex. 2, p.32] Mr. LeBlanc testified the pre-tow questionnaire was used by the captain to plan the voyage. The questionnaire was not designed to be used during the voyage

¹⁰Crew change for the M/V DELTA OWL occurred every seven days. [LeBlanc 9-7-10]

¹¹When asked at trial whether he recalled any captains who were reprimanded for not filling out paperwork, Kevin LeBlanc, Delta’s operations’ coordinator recalled two; he could recall no problems with Captain Gauthier’s paperwork or maneuvering.

¹²As an apprentice mate, Mr. Faircloth was not supposed to be holding watch unless the captain was on the bridge. Once he had his mate’s license, he would be allowed to hold watch without the captain on the bridge.

itself, but rather, was merely used to plan a safe voyage. When an apprentice mate, mate of towing, or even a relief captain takes over the wheel, it is his duty to follow the instructions of the master of the vessel - in this instance, Captain Gauthier. [LeBlanc 9-7-10] It is the captain and the captain alone who is responsible for planning the voyage.

The testimony at trial was that the Ellender bridge is lit, but the area around the bridge does not have an abundant amount of light. [LeBlanc 9-7-10] The accident occurred while it was dark. Furthermore, the testimony at trial was that it was unlikely the mate (or captain) would have been able to see the derrick from the wheelhouse, because the living quarters would likely obstruct the view, unless the rope pulling the rig was hooked up long. Furthermore, there was no evidence presented at trial indicating it would or should have been obvious, by sight alone, that the tow would not pass safely under the bridge, even had there been abundant light at the time of the allision.¹³ Therefore, even had the captain been at the wheel at the time of the allision, the allision would still likely have occurred, as the captain had failed to determine the clearance under the Ellender bridge prior to the allision.

At the time of the incident, Mr. Faircloth had completed all requirements necessary to obtain his mate of towing license, including submission of his application and paperwork to the Coast Guard. However, he did not receive the actual license until after the allision. There was no evidence presented at trial that Mr. Faircloth would have done anything differently had he had his mate of towing license at the time of the incident. Again, Mr. Faircloth had only been at the wheel for

¹³Even had Mr. Faircloth been able to see the derrick from the wheelhouse, because his tug was pulling the tow, in order to prevent the allision he would have had to look backward at the derrick, while still at a sufficient distance from the bridge to be able to stop the tug, and determine visually whether or not it appeared the derrick would clear the bridge. If there were only a small amount of clearance, such a task would be difficult, if not impossible, for even the most experienced of mariners.

approximately fifteen minutes at the time of the allision.

V. Damages

Basic bears the burden of showing “the amount, as well as the fact, of damages.” *Pizani v. M/V Cotton Blossom*, 669 F.2d 1084, 1088 (5th Cir. 1982). The general rule for recovery of damages in maritime collision cases is *restitutio in integrum*, meaning “damages assessed against the respondent shall be sufficient to restore the injured vessel to the condition in which she was at the time the collision occurred. . . .” *The Baltimore*, 75 U.S. 377, 385 (1869). “However, that measure has long been equated with the cost of necessary repairs and the loss of earnings while they are being made.” *Delta Marine Drilling Co. v. M/V BAROID RANGER*, 454 F.2d 128, 129 (5th Cir.1972). “Even if repairs are never effected, an injured shipowner is still entitled to recover the estimated cost of repairs therefor.” *Tug June S v. Bordagain Shipping Co.*, 418 F.2d 306, 307 (5th Cir. 1969). A party who claims damages for injury to property has a duty to take reasonable efforts to mitigate the damages, and recovery will be reduced to the extent damages are enhanced by an unreasonable failure to mitigate. *See e.g., Marathon Pipe Line Co. v. M/V SEA LEVEL II*, 806 F.2d 585, 592 (5th Cir.1986). “The burden rests with the wrongdoer to show that the victim of tortious conduct failed to mitigate damages.” *Id.*

In maritime collision and allision cases, when there is an injury to property and the market value of that property is unknown, “the amount of damages must be determined by the cost of repairs to the property.” *Freeport Sulphur Co. v. S/S Hermosa*, 526 F.2d 300, 304 (5th Cir. 1976). But where the market value of the property is known, and the repairs necessary to correct the damage enhance the pretort value of the property (a concept referred to as “betterment”), the increase in value is typically deducted from the plaintiff’s recovery for the cost of repairs. *Id.* Nevertheless, in this

matter, **Delta specifically and explicitly waived, on the record at trial, the right to argue any improvements to Basic's Barge Rig 14 constituted betterment.** [Counselor LeBreton, 9-13-10]

Thus, to the extent this Court were to find any repairs added new value to, or extended the useful life of the rig, its parts and/or equipment, no reduction will be made to account for any betterment of that property.

A. Property Damages¹⁴

Basic claims it is entitled to \$927,424.27 for all property damages caused to Barge Rig 14 in the allision. [Doc. 64, p.1] Delta argues \$489,806.43 is the appropriate cost of all repairs. [Doc. 37, p.7 & Doc. 60, p.5, as modified orally at trial on 9-13-10]¹⁵ The parties agreed that certain repairs were necessary, and the amount charged for repair of those items (\$200,454.43) was reasonable. [Doc. 60, p.1]

From the time Rig 14 entered the shipyard, Basic was meticulous in identifying and segregating those expenses which were accident-related, and those expenses which were not. Dub Harrison, Vice President of the ArkLaTex Region of Basic Energy Services Inc., traveled to Superior's shipyard and inspected Rig 14 within a couple of days of the allision. Andy Gardner, Manager of Superior, testified he and Mr. Harrison, from the very beginning, separated the work into accident and non-accident repairs, to the best of their abilities. Brandon McGuire, Regional Controller for Basic, testified three categories of expenses (which he referred to as "buckets") were

¹⁴At the time of the allision, Rig 14 was approximately 35 years old.

¹⁵During trial (on 9-13-10), the parties modified the amount of their written stipulation of property damages as follows: Delta agreed \$1,000.00 was owed to Basic for repair of the vent line [*see* Doc. 60, p.3], and Delta agreed \$2,000.00 was owed to Basic for repair to the driller's enclosure. [Id.] Accordingly, Delta agrees \$489,806.43 is owed to Basic for property damages.

created, and every charge from Superior was assigned by Basic to one of those “buckets.” One category consisted of those expenses which were 100% accident-related. The second category consisted of “AFE repairs,” which is “approval for expenditures.” (Essentially, these were major repair and maintenance costs, which Basic categorized as capital investments, such as the cost of repairs to Rig 14's derrick base due to corrosion and pitting¹⁶, and the purchase of a new drawworks.¹⁷) The third category consisted of “straight expenses,” that is expenses specifically related to Rig 14, but unrelated to the allision and not AFE expenses. (Examples of the third category of expenses are: payroll for the crew that remained with Rig 14 while in the yard, grocery expenses, paint, splice, etc.¹⁸) Basic seeks recovery from Delta only for those damages falling in the first category or bucket, which again, is a total of \$927,424.27.

Mr. Harrison testified at the time of his first inspection, none of the rig's equipment or component parts had yet been removed from the rig. After his initial inspection, Mr. Harrison consulted with Paul Reeves (a Basic employee) and Andy Gardner, and then decided the next steps should be removal of the derrick and removal of those component parts which needed further inspection. In addition to allowing for a better inspection of the derrick and various component parts, the removal of these items would allow for a better inspection of the damages to the rig itself. At the initial meeting, Mr. Harrison advised Mr. Gardner that because Rig 14 would be in the

¹⁶The Court notes Delta argued at trial that Basic used this allision as an opportunity to obtain a completely refurbished rig at Delta's expense. The Court found that argument to be wholly without merit. As an example, as noted above, from the very outset Basic identified the cost of repair to the mast base as an expense unrelated to the allision. Had Basic been attempting to “fleece” Delta, it easily (and credibly) could have argued the mast base was damaged due to the allision, despite the fact that it had preexisting corrosion and pitting.

¹⁷Mr. McGuire testified these expenses totaled approximately \$2,431,585.00.

¹⁸Mr. McGuire testified these expenses totaled approximately \$481,000.00.

shipyard for some time, Basic wished to take advantage of the downtime to perform certain other repairs and upgrades to the rig, which were not related to the allision. Due to the foregoing, Mr. Harrison instructed Mr. Gardner to keep track of that work which was accident related, and that work which was not.

At trial, counsel for Delta inferred Superior should have provided more inspection reports and more detailed reports. The Court found this argument unpersuasive. A review of the documentary evidence reveals the reports, scope of work documents, etc. provided sufficient detail. Mr. Harrison testified the reports he received had the same level of detail as others he had received during his career for similar work; Mr. Harrison received additional, verbal reports from his employees, who he had monitoring the progress at the yard on a daily basis; Superior submitted work tickets to Basic on a weekly basis; and Mr. Harrison continued to have discussions with Mr. Gardner while the rig was being repaired.

Counsel for Delta argued Basic should have obtained bids from companies other than Superior, and should have considered the use of subcontractors, such as National Oil Company, for equipment repair. [Doc. 37, p.8] The Court found this argument to be without merit. Mr. Harrison testified he and Paul Reeves decided to tow the barge to Superior for repairs, as he was aware of no other comparable facility in the area (*i.e.* with a bulkhead and shipyard). Mr. Harrison further testified he is familiar with National Oilwell, which is a Wilson dealer that also repairs Wilson drawworks, but to his knowledge, it did not have a yard in the Port of Iberia. He testified in December of 2004 or early 2005, Basic had the drawworks on Rigs 10 and 11 remanufactured at Superior's yard, but National Oilwell did the actual remanufacture on the drawworks. He said it took three to four months to rebuild the drawworks, and in his opinion, National Oilwell took too long

to complete the work, in part because the closest shop facility National Oilwell had for rig mechanics was in Victoria, Texas. The distance to National Oilwell's shop also necessitated extensive overtime payments. Mr. Gardner testified Superior's only true competitors in this region are Regional Fabricators and National Oilwell. However, National Oil Well has no facilities at the Port of Iberia, and Regional Fabricators is not an API certified manufacturer and does not work on drawworks. The Court finds the evidence does not show that Superior's bid was unreasonable or inflated, nor does it show what other companies would have charged for the necessary repairs. Accordingly, the Court finds Delta has failed to carry its burden of proving Basic failed to mitigate its damages by not seeking and selecting a different and perhaps lower bidder. *Marathon Pipe Line Co.* at 592.

1. Disassembly

The initial portion of the work involved the removal and tearing down of equipment, so that all potentially damaged parts could be better inspected. Mr. Harrison testified in his discussions with Mr. Gardner regarding this phase of work, both he and Mr. Gardner agreed the best course of action was to bill for this initial phase of work on a time and materials basis, as it was impossible to determine the full extent of the damages and amount of work required at this point. On February 6, 2008, Superior submitted an invoice to Basic in the amount of \$27,447.66. This portion of the work included sandblasting the drawworks, rotary table and hook/block combination along with the sheaves for inspection, hauling the equipment from the shop to the sandblast area, hauling the equipment from the sandblast area back to the shop, and disassembling and inspecting the compound shaft, control panels, brake system and rotary pinion shaft. Mr. Harrison testified, based upon his experience with hundreds of drawworks and rig repairs, that the price charged by Superior, \$27,447.66, for this portion of the work was reasonable and fair. Mr. Busse, Basic's expert,

provided an estimate of \$18,421.00 for this portion of work. Mr. Busse testified his estimate is lower, because it does not include the traveling block or swivel. However, he admitted that if it was necessary to disassemble the traveling block and swivel in addition to the other parts, then \$18,421.00 would be an appropriate charge. This Court finds, based on the testimony presented, it was necessary to disassemble the traveling block, as will be discussed in greater detail below.

On March 11, 2008, Superior submitted a second invoice to Basic in the amount of \$25,136.70. This portion of the work involved disassembling the drawworks, cleaning various parts so they could be inspected, inspection of the drawworks and various parts, creation of a parts' list for the drawworks, rotary table and hook/block combination, disassembly of the rotary table, hook/block combination, hydromatic brake, traveling hook/block and drum, and disassembly of the rotary compound skid, control panel and V-80 brake. [Ex. 25, p.42] Mr. Harrison testified, based upon his experience with hundreds of drawworks and rig repairs, that the price charged by Superior, \$25,136.70, was fair and reasonable. Mr. Busse testified these invoices should have been less, as it was unnecessary to disassemble the hook, block and swivel.¹⁹ Mr. Busse provided an estimate of \$18,421.00 for the February invoice, and \$16,360.00 for the March invoice. Mr. Busse testified his estimate is lower, primarily because it does not include the block or swivel. However, he admitted that if it were necessary to disassemble the swivel and block in addition to the other parts, then \$25,136.70 would be an appropriate charge for the March invoice. Again, based upon the testimony presented, this Court finds the damage sustained necessitated disassembling the block and swivel, as will be discussed in greater detail below.

¹⁹Counsel for Delta argued the invoices were too high because Superior took too long to complete this portion of the work.

Mr. Harrison testified he did not agree with Mr. Busse that the portion of the work covered by these two invoices should have cost less, and he emphatically stated as Vice President of Basic, had he had any question about the cost of the charges he would not have approved and initialed the invoices.

The Court found the testimony of Mr. Harrison and Mr. Gardner to be credible on these issues, and agrees the amount charged by Superior was warranted and justified. Accordingly, Basic is awarded \$52,614.36 for the work addressed in the February and March 2008 invoices.

2. Sandblasting & Magnaflux Inspection

Superior billed Basic \$45,964.13 to sandblast, magnaflux, reblast²⁰, and prime and coat all parts - other than the mast - from the rig floor to the barge deck.²¹ Mr. Gardner and Mr. Harrison testified this included sandblasting and magnafluxing the rotary table, the input shaft on the rotary table, compound shafts nos. 1 and 2, the drum shaft, the swivel, the hook/block combination, the drawworks frame and guards, the load areas, as well as certain structural items in the substructure.²² While Superior was performing the foregoing work, they also repaired all cracked welds found.²³

²⁰Mr. Gardner testified it is standard practice to do a quick reblast to the items being magnafluxed, because the NDT testing requires the welds to be exposed and inspected, and any necessary repairs have to be made, and if, during that time, the metal begins to re-oxidize, the parts must then be reblasted prior to painting. He further testified in South Louisiana, metal typically must be reblasted if not primed within one day of the original blast.

²¹The cost of sandblasting the mast is included separately under the mast repairs.

²²The entire substructure was not sandblasted. Rather, only the particular welds that were Magnaflux tested were sandblasted.

²³Mr. Gardner testified some of the cracked welds may have been due to the accident, some may have been due to the age of the rig, and some may have been caused by both age and the allision. However, he has no way of discerning the cause of the crack, other than perhaps a metallurgical analysis of each weld (or perhaps a visual inspection to determine if the crack had any rust, which would be an indication the crack was due to age rather than the allision), which was not done in this matter. The

Mr. Harrison testified in his experience, this was a reasonable price for the work completed.

Mr. Busse estimated this portion of the work should have cost \$23,595.00. He testified he arrived at this figure by taking out the cost of sandblasting to the traveling block, the swivel, and the mast²⁴, estimating a three man crew (with two men at \$45.00 per hour and a supervisor at \$65.00 per hour) working for eight hours per day for 14.5 days, for a total of \$23,200.00, and he then “added miscellaneous to round it to \$23,595.” Mr. Busse further testified he was of the opinion this portion of the scope of work was inclusive of all magnaflux testing, including the derrick, however, he admitted he saw in the scope of work a separate entry where Superior charged for magnaflux testing the derrick. Mr. Busse never asked anyone with Superior if this was a duplication. When asked to clarify what magnaflux testing his estimate did include, and if it was just the drawworks, Mr. Busse cited the drawworks frame, the rotary table, the driller’s console, but clarified he could not name all parts he had included. He later testified although sandblasting was not necessary to magnaflux test the substructure, he nevertheless approved it in his report. He admitted he never spoke to anyone with Superior about what was or was not encompassed in their charge, nor did he check with any other shipyards to see what their estimate would have been for this portion of the work.

Mr. Busse conceded on cross that a visual inspection will not always reveal all welding failures, particularly latent failures. He additionally conceded if a visual inspection of a noncritical area revealed no damage, there could still be fractured welds, but he maintained, without credible support, those fractured welds would not be due to the allision. However, he agreed the best way to

amount charged for sandblasting and magnafluxing would not have changed even had Superior repaired no welds.

²⁴Again, the Court notes this charge did not include the cost of sandblasting and magnaflux testing the mast.

determine the integrity of the welds would be to magnaflux test the welds.

After hearing the testimony at trial and judging the credibility of the witnesses, the Court finds Mr. Busse's testimony unpersuasive and without true support. The Court finds the testimony of Mr. Gardner and Harrison persuasive and with support. Consequently, the Court finds the amount billed by Superior was appropriate for the work performed, and the work was necessitated by the allision. Accordingly, Basic is awarded \$45,964.13 for the sandblasting and magnaflux testing.

3. Mast

At trial, Basic argued the racking board made initial contact with the Ellender bridge, and as the rig continued under the bridge, the derrick was essentially lifted up and the lowest section of the mast peeled up off of the rig floor. Because the forces essentially traveled the length of the mast, Basic felt it was necessary to inspect the entire mast. Delta on the other hand argued it was only necessary to inspect that which constituted the "critical path" of stress to the mast, by way of nondestructive testing, and then repair any damage which the inspection revealed. Additionally, there was much testimony on both sides regarding an API Category IV inspection, and whether or not the mast needed to be inspected in accordance with same. However, as the testimony unfolded, it became clear that Basic and Superior were not using the phrase "Category IV inspection" in its traditional sense, but rather as shorthand for the inspection Basic ultimately chose to have done on the mast; the inspection ultimately performed by Superior at Basic's request was more thorough than an API Category IV inspection.

Mr. Spry (the toolpusher assigned to the Barge Rig 14 for approximately fifteen years)

testified once they arrived at the shipyard, he conducted a second inspection of the rig.²⁵ Mr. Spry had the crane operator lift him in the basket, so that he could view the rig from overhead. He testified the mast appeared to have “a little bit of a twist to it from where it had hit the bridge.” When the mast was removed from the rig at Superior’s shipyard, Mr. Spry saw damage to the padeyes, and the traveling block was hanging from the mast. Because the traveling block (which has a load rating of 200 tons) was found hanging from the mast after the allision, he was concerned the shock load caused by the block hitting the mast may have further damaged the mast, in addition to the damage caused by the mast hitting the bridge.

Andy Gardner (Manager of Superior Derrick Services) testified upon visual inspection, the mast appeared to be bent. He testified there is no written code or standard procedure “that tells you what to do in this situation when the mast . . . interacted with a bridge.” Mr. Gardner and Mr. Harrison agreed the mast needed to be fully inspected to determine its integrity before Basic’s crew returned to work on Rig 14. Mr. Harrison ultimately instructed Superior to tear the mast down, inspect it over and above that which would be required for an API Category IV inspection, and make certain the mast met the original equipment manufacturer’s requirements. Mr. Gardner testified Basic wanted a Category IV inspection, as that inspection entailed an inspection of all welds on the mast, and Basic and Superior were of the opinion all welds needed to be examined to ensure the crew’s safety. Mr. Gardner testified even if the API and/or Category IV standards did not exist, he would have advised Basic to inspect the mast in the exact same manner as it ultimately was inspected, as that was the only way to ensure the integrity of the mast had not been compromised

²⁵Mr. Spry initially inspected the rig immediately after the allision, while still at the Ellender bridge.

before allowing men to work on and around the mast.

Mr. Gardner testified when the mast was actually inspected, Superior, in fact, found cracked welds, which were later repaired. In addition to the inspection and repairs made pursuant to the inspection, this portion of the scope of work also included the fabrication and installation of new handrails on the crown frame, repairs to the mast stern, testing of the reassembled mast, fabrication of a new racking board and knee braces, and the cost of new pins and bolts. Superior charged Basic \$170,284.04 for all work done on and to the mast. [See Trial Stipulation II, p.4]

Mr. Harrison testified after his initial inspection and consultation with Mr. Gardner (a licensed engineer), he decided to have every weld on the mast inspected.²⁶ Mr. Harrison testified in his opinion, the impact to the mast had to be very powerful to cause such great damage, particularly in peeling up the skids. Mr. Harrison wanted to make certain the derrick was safe before putting his crew back to work, as his crew must work in the air, under the mast, while pulling 220,000 pounds on the mast. Due to the foregoing, Mr. Harrison requested Superior conduct a Category IV inspection, as that entails magnafluxing the stress points, as well as an inspection of all welds on the mast. Mr. Harrison testified his concern was not necessarily having a Category IV inspection performed, but rather, he wanted the integrity of the mast verified, and in his experience, often damage is difficult to detect unless the equipment is subjected to magnaflux testing, which a Category IV inspection entails. However, Mr. Harrison had Superior conduct a more thorough inspection than a Category IV inspection, as he had Superior inspect every weld on the derrick legs,

²⁶On cross-examination, when asked why Basic chose to inspect every weld on the entire mast, whereas it chose to only inspect the critical welds on the substructure, Mr. Harrison testified they wanted all welds on the mast inspected because the mast is the portion of the rig that bore the brunt of the impact with the bridge.

which is more than would be required in a Category IV inspection.

Mr. Harrison testified he had been involved with magnaflux testing approximately 100 times during his career. Mr. Harrison testified the mast had to be sandblasted in the areas where it was to be magnafluxed²⁷, and it was then magnaflux tested and all necessary repairs were made. The repairs were then magnaflux tested, and a second sandblast was made to the mast.²⁸ Basic chose to sandblast the entire mast (rather than merely the welds subjected to magnaflux testing), because had they instead chosen to sandblast only the welds, make repairs, and then spot paint the sandblasted areas, the mast would have looked strange.²⁹ Mr. Harrison testified he was of the opinion that any additional time or money incurred in sandblasting and repainting the entire mast was, at most, minimal. Mr. Harrison had no reservations about the amount charged by Superior for repairs to the mast, testifying the amount was in line with what he had seen in his prior experience.³⁰

Ronald Sikora, Basic's expert marine surveyor, testified in his opinion, an inspection of the

²⁷For aesthetic reasons, Basic chose to sandblast the entire mast, rather than merely those areas that were to be magnaflux tested.

²⁸The second sandblast (or "sweet blast") is conducted to remove any rust that may have accumulated while undergoing magnaflux testing and repair. [See e.g. Ex. 39, p.14] A sweet blast is very quick to perform, because the equipment has already been blasted down to bare metal in the original blast. Mr. Harrison testified in his thirty-plus years of experience with rigs, a second sandblast has been standard procedure.

²⁹When asked on cross examination whether Basic really chose to sandblast the entire derrick because they wanted a "nice paint job when it was all finished," Mr. Harrison responded Basic chose to do so, so that they would not have a derrick they were "ashamed of."

³⁰Mr. Harrison additionally testified when Basic purchased the rig (approximately one year prior to the allision), there was some pitting and rust at the bottom of the mast. While the rig was in Superior's facility, Basic had the rust and pitting on the bottom portion of the mast repaired. A new bottom A-frame was built for the mast to sit on, as Basic determined that was faster than attempting to repair the A-frame. Basic always considered this expense to be a non-allision-related expense, and never submitted an invoice for this service to Delta.

entire mast was warranted (rather than merely an inspection of the “critical path”), because if there existed a flaw in a weld on the mast, any sudden stress could cause the weld to fracture. Mr. Sikora additionally testified it was faster to sandblast the entire mast, rather than sandblast each weld on the mast.

Mr. Busse testified an API Category IV inspection is a maintenance inspection. Mr. Busse testified if a mast was damaged so greatly that he felt a Category IV inspection was warranted, in his experience, it was cheaper to build a new mast or section of mast, rather than repair the existing mast. However, Mr. Busse testified a Category IV inspection would be sufficient to evaluate the safety of the mast. He testified when conducting a Category IV inspection, one should first visually inspect every weld on the mast. If any actual damage is detected (evidenced primarily by damage to the paint³¹), it is marked for nondestructive testing. After the visual inspection, one determines the critical path of the loads that passed through the mast and then conducts magnaflux testing on all welds in the critical path.³² Mr. Busse testified it is unnecessary to remove any paint prior to magnaflux testing, and his preferred method is to use a large magnet which is manufactured for that purpose, which often eliminates the need to remove paint.³³ He testified it is much more costly to sandblast, because in order to sandblast, all electrical components must be removed from the mast.

Mr. Busse testified after the mast was removed from the barge but before Superior began the

³¹Mr. Busse explained one can inspect a painted weld by looking to see if the paint is damaged. Because paint is more brittle than steel, when there is an overstress in the steel it will move, and the paint will pop loose. If one sees a paint failure at the weld area, that indicates a possible overstress area and a possible failure.

³²Mr. Busse defined “critical path” as any area where there is a large force and a suspicion there may be a problem.

³³Mr. Gardner, Mr. Harrison and Mr. Sikora all testified any paint must be removed in order to conduct magnaflux testing.

actual repair work, he visually inspected every weld on the mast, and his inspection revealed no defective welds. Mr. Busse however, made the assumption that the racking board was the only portion of the rig to make contact with the Ellender bridge.³⁴ Based upon the foregoing assumption, Mr. Busse made the following determination as to how the forces traveled through the mast during the allision: the bridge made contact with the racking board, mainly on the driller's side; the bridge first hit the diagonal, and then the bottom portion of the racking board on the driller's side; the force then traveled down to the pinned area, which is the front leg of the middle section; the forces then traveled from the middle section to the lower section to the rear leg of the lower section to the pinned connection at the mast base, creating a significant horizontal force through the base section and into the rotary and drawworks skid, such that the welds of the rotary and drawworks skid ripped, raising the drawworks skid and pushing the mast forward, such that the racking board dropped below the bridge and the whole unit passed under the bridge. Under Mr. Busse's analysis, when the mast was tearing loose, there were no forces on the upper section (or crown) of the mast. However, once the mast moved forward and dipped down, the crown made contact with the rear tug, causing a very light force - essentially, just antennas on the tug, which damaged only the handrails on the crown.

Mr. Busse testified when Superior string lined the mast, it was misaligned to such a degree that it was not within its fabrication tolerance. However, Mr. Busse testified it was his opinion that any misalignment of the mast was not caused by the accident. (Mr. Busse further testified all Superior needed to do to repair the mast was cut two diagonals of the mast, substitute new diagonals, realign the mast, and weld the mast back together.) Mr. Busse's estimate for repair of the mast was

³⁴The Court ruled no foundation was laid to support Mr. Busse's theory that only the racking board made contact with the bridge.

\$75,000.00. Mr. Busse testified his estimate included the following: a visual inspection of every weld on the mast; magnaflux testing of all welds in the critical path³⁵; magnaflux testing of any welds not in the critical path, but where the inspector saw a potential failure; repair of any damaged welds found; replacement of the racking board and lower mast support.³⁶ Mr. Busse testified he calculated the cost of the racking board and lower base section at \$20,000.00 each.³⁷ Mr. Busse testified the cost for inspecting all welds on the mast (rather than merely those required for a Category IV inspection) would be an additional \$800.00, if one did not sandblast. Mr. Busse testified the main difference in the cost charged by Superior and the estimate provided by Mr. Busse is attributable to the sandblasting, priming, painting, removal and reinstallation of electrical components, and remanufacture of the stairways or ladders.³⁸

³⁵When asked on cross-examination whether or not he could state the “critical path,” Mr. Busse stated he could not. He further admitted one would need to know exactly what part of the mast hit what part of the bridge, the speed at which the allision occurred, and what bore the load in order to determine the critical path. Mr. Busse did not perform an accident reconstruction, nor could he adequately support his assumption as to what actually occurred at the time of the allision.

³⁶Mr. Busse testified although the lower mast support did not show a lot of damage, he felt it was so critically stressed, it would justify a total replacement. He further testified his estimate did not include sandblasting, and did not include an inspection of all welds on the mast base, but merely those welds that showed visual damage, despite the fact that the mast base was peeled up during the allision. Nor did Mr. Busse’s estimate include repairs to any damaged welds discovered during the inspection.

³⁷Mr. Busse testified he arrived at his figure by estimating a five man crew (three men at \$65 per hour and two at \$45 per hour), working an eight hour day for a total of eight days, for a total labor cost of \$18,240.00. He tacked on \$1760.00 for materials and miscellaneous items, “which rounded up to \$20,000.” He then testified, “And I said I’ll use that same figure for the base section.”

³⁸Superior actually replaced the handrails - not the stairwells or ladders. There were several other instances where Mr. Busse was unclear as to the scope of work performed by Superior, or unclear as to the damages for which Basic sought indemnity from Delta. For example, Mr. Busse testified Superior did not need to magnaflux test the mast base, as his estimate included the cost to completely replace the base. However, as earlier noted, Basic has never made demand upon Delta for damages caused to the mast base, because Basic determined the base was so pitted and corroded pre-allision, that Delta bore no liability for any damage caused to the base during the allision.

Mr. Trickey (a surveyor with London Offshore Consultants, Basic's hull insurer) testified by deposition that the mast could have been repaired by only repairing the specific damaged locations. [Trickey p.47] He testified he would have cleaned any joints that looked damaged and conducted non-destructive testing on those joints. [Id. at 47-48] Mr. Trickey did not originally address whether or not the entire mast should have been sandblasted, as he was not "being asked to make detailed recommendations on the repairs. . . ." [Id. at 49]

The Court agrees the mast, and all of its welds, needed to be fully inspected, given the damage to and condition of the mast, as well as the critical role played by the mast and the close proximity of men to the mast during the drilling process. The mast had allided with a bridge, causing a large portion of the rig to peel up from the barge floor.³⁹ Basic would have a crew of men working in, around and under the mast during the drilling process, and thus, it was incumbent that Basic be certain of the mast's integrity prior to putting their crew's lives at risk. The Court finds Delta's argument - that a Category IV inspection was unnecessary, and was only done because Delta was paying for the repairs - to be wholly unfounded. The Court found Mr. Harrison's testimony on this issue to be fully credible - *i.e.* what Basic sought was an inspection of every weld on the mast due to safety concerns, and although the inspection performed encompassed a Category IV inspection, obtaining a Category IV inspection was not important to Basic and was merely a by-product of the required testing necessitated to assure the safety of the mast given the damage sustained due to the

³⁹Even Mr. Busse testified both ends of the mast sustained trauma - the base (which peeled up) and the crown (which came in contact with the pushing tug). Thus, according to Mr. Busse, the mast sustained a dual load (both horizontal and vertical) at the same time, thus further supporting the need for an inspection of the entire mast.

allision.⁴⁰ The Court further finds the repairs to the mast were necessitated by the allision, and to the extent any betterment of the mast might have occurred by way of the repairs, Delta waived its right to argue damages should be reduced by that amount by its declared strategic choice.

The Court found Mr. Gardner's testimony as to the scope of work to be credible. It found Mr. Busse's assumptions of that which was involved in repairing the mast to be erroneous, and not reflective of the actual work performed. The Court found the testimony of Basic and Superior to be more credible as to the manner in which magnaflux testing of the mast should have occurred; more specifically, the Court agrees that after the allision, it was prudent and appropriate to inspect all welds on the mast, as all welds were critical after the impact with the bridge and resulting trauma inflicted upon the rig. Additionally, the Court finds it was appropriate to sandblast the welds for magnaflux testing (and thus, it was appropriate to remove the electrical equipment). Accordingly, Basic is awarded \$170,284.04 for the repairs to the mast.

4. Lights and Electrical

Basic was charged \$10,045.40 for repair and replacement of the damaged lights and electrical equipment on the derrick and drawworks by Bayou Boeuf.⁴¹ Delta argues it should be awarded \$0 for this item.

Following the allision, the derrick lights (meaning those lights that showed the derrick was in an upright position) were removed from the rig at Superior's shipyard. Upon inspection, the

⁴⁰On cross-examination, when asked whether having documentation that the mast had passed a Category IV inspection was helpful in marketing Rig 14, Mr. Harrison unequivocally testified that marketing was not his motivation for having the inspection done, as only one customer had ever inquired about a Category IV inspection to Mr. Harrison.

⁴¹The price included two lights, cabling, couplings, connectors, clips, conduit, clamps, lock ties, splicing tape, terminals, sealant, and labor.

derrick lights were no longer operational, as the ballast had shorted, some of the lights were bent, and some of the glass lenses were broken. According to Mr. Spry, the flood light was bent and mutilated. In order to remove the derrick, the wiring for the lights had to be cut.⁴² According to Mr. Spry, once the wiring to the lights is cut (which again, was necessitated by removal of the derrick), it would not be good practice to reuse the lights, as it would potentially create a safety hazard.

[Ex. 56, p.129]

Mr. Sikora, Basic's expert marine surveyor, testified it was necessary to remove and replace the wiring in the derrick, due to the sandblasting that was to be performed and for safety reasons. He testified it was possible to remove the wiring in such a manner that it could have been reused, provided that upon removal, the wiring was not damaged.

Mr. Harrison testified the lights on the bottom portion of the derrick were damaged, but the rest of the lights remained functional. However, because he intended to have the entire derrick sandblasted and magnaflux tested, all lights and electrical equipment had to be removed. Mr. Harrison testified he instructed the repairmen to save everything that was salvageable for reuse on the rig. Mr. Harrison testified, based upon his experience, he had no question that the amount of the invoice was reasonable and appropriate, as it was in-line with similar invoices he had seen in the past for this type of repair work.

Mr. Busse allocated \$0 for lights and electrical, as his opinion was that had Superior not sandblasted the mast, there would have been no need to replace the lights and electrical equipment. However, he agreed that if one were to magnaflux test the middle and lower sections of the mast,

⁴²Mr. Spry testified the wiring for the derrick lighting runs down to the rig floor where the driller stands, and then runs down into the generator room. The wiring for the floodlights runs through the pan under the draw works and back down to the switchboard in the generator room.

and if one chose to sandblast in order to conduct the magnaflux testing, the wiring would have to have been removed, and \$10,045.40 would have been an appropriate cost for the work involved.

The Court finds it was reasonable to sandblast the mast in order to fully inspect it, and thus the replacement of the electrical components was required. Accordingly, Basic is awarded \$10,045.40 for the lights and electrical work.

5. Circulating Pumps

Rig 14 was equipped with two circulating pumps. Both were replaced during the repair work to Rig 14. Basic paid \$7,008.03 for new circulating pumps; Delta argues Basic is entitled to \$0.

Mr. Spry testified the circulating pumps and the electric motor which power the pumps are joined together with a coupling. During the allision, the leg of the derrick rest smashed the middle of the coupling on one of the pumps, breaking the coupling's cover, the feet on which the electric motors sit, and crushing the top of a pump. He testified the water lines connecting to both pumps were broken. (Mr. Spry testified the only damage he saw to the second pump - *i.e.* the pump on the driller's side - was the broken waterline.)

Mr. Harrison testified the pump on the driller's side was cracked near the top of the housing, where the plumbing enters the housing. Mr. Harrison decided to replace both pumps because the pump he inspected was cracked, and he had been told the other pump was broken as well. (Mr. Harrison personally only examined the pump located closest to the driller's shack). He testified he chose to replace the pumps, because it was faster and less costly to replace them than to repair them. Mr. Harrison testified the replacement pumps were one size larger than the original pumps, and thus, he presumed the pumps purchased by Basic were more costly than had Basic replaced the pumps

with the same size pumps as were on the rig pre-allision.⁴³

Mr. Busse did not see the circulating pumps when he conducted his inspection. He testified if only one pump was damaged, the motor would not need to be replaced. At trial, he estimated the cost of one pump would be approximately \$1,500.⁴⁴

As noted, Basic bears the burden of showing “the amount, as well as the fact, of damages.” *Pizani v. M/V Cotton Blossom*, 669 F.2d 1084, 1088 (5th Cir. 1982). With regard to the circulating pumps, Basic did not carry its burden of proof to show the cost of replacing the circulating pumps with pumps of the same size as were on Rig 14 pre-allision. Accordingly, Basic is awarded \$0 for the circulating pumps.

6. Vent Line

Superior charged Basic \$5,240.24 to fabricate and install a new vent line from the gas buster to the mast.

Mr. Spry testified the bottom portion of the vent line was damaged in the allision. Particularly, the bottom of the union was pulled off of the threads.

Mr. Gardner testified the vent line was costly to repair, because the top of the gas buster was bent, so the repairs to the vent line also included repairs to the gas buster. He further testified the vent line was pulled in the stern direction by the kelly hose, causing the vent line to bend and the

⁴³Basic had not prepared an estimate of the cost to replace with pumps with pumps as were on the rig pre-allision, because Mr. Harrison thought Basic had merely replaced the pumps with similar pumps up until he began preparing for trial.

⁴⁴Mr. Busse’s estimate for the cost of the pump was not prepared in advance of trial, but rather, was merely a number to which he speculated while providing testimony at trial. He arrived at this figure by speculating that the total cost for two circulating pumps would be approximately \$7,000.00, that the electric motors would cost more than the pump, and then stating one pump would cost about \$1,500.00. He provided no foundation in support of any of the foregoing monetary figures.

threaded connection (or pipe nipple) on top of the gas buster to rip, and causing the top of the gas buster to bend. The pipe nipple connection and the actual vent line connection (from the gas buster to the vent line on the mast) needed to be replaced, because the bend in the pipe prevented a refitting of the connection at the mast. Mr. Gardner testified it was more cost effective to replace the vent line than to repair it, as repairing it would have entailed heating, pushing, rethreading, sandblasting, inspecting, repairing any cracked welds, painting, etc.

Mr. Harrison testified he saw the damage to the vent line at his initial inspection. He testified the vent line was considerably bent, and it was easily visible to the naked eye. (Mr. Harrison did not personally notice the damage where the hammer union meets the gas buster, because he stopped looking further when he saw the bend in the vent line. However, he saw the damage to that area in the photographs.) Mr. Harrison testified it would have been difficult to simply hammer the vent line back into place, but it probably could have been done. However, he was of the opinion it likely would have required heating as well, and it may have taken just as long to repair it as to replace it. Mr. Harrison testified he would not have repaired it, as he felt it was a safety risk to do so, as the vent line is subjected to 400 - 500 pounds of pressure at a time, and thus he would not have been comfortable with a vent line that had been heated, rebent, and stressed into the correct position. Mr. Harrison testified the amount charged by Superior for the vent line was fair and reasonable.

Mr. Busse testified if the vent line were bent, it could be repaired by heating it and straightening it back into position. Mr. Busse originally allocated \$0 for the cost of repairing the vent line. However, after seeing the evidence at trial, he allocated \$1,000 for repair of the vent line. Included in that estimate is \$200 for a weld reducer, \$50 for a thread nipple, \$300 for a hammer union, two welders at \$65 per hour for two hours, \$50 for "material," and then "rounding out" to

\$1000 total. Mr. Busse admitted he came up with the dollar amounts *by guessing*, and did not call any parts manufacturers or any other source to verify his numbers. Under cross, Mr. Busse testified he had not inspected the vent line, because it was gone when he visited the site. He could not recall whether or not the gas buster was on the drill floor when he made his first two inspections.

The Court found the testimony of Mr. Spry, Mr. Harrison, and Mr. Gardner exceedingly credible; it found Mr. Busse's testimony to be of little benefit. Accordingly, Basic is awarded \$5,240.24 for the vent line.

7. Swivel

After the accident, Mr. Spry saw that the swivel no longer sat straight, but was bent. He testified the swivel was in the boot (or rathole) at the time of the allision. The boot sits on the rig floor - not on the skid. When the allision occurred, the swivel was pulled by the attached hose, as the hose is attached to the derrick. When the derrick moved during the allision, the swivel was subjected to a sideways pull by the hose. The swivel is designed to pull up and down (not sideways), and a sideways pull on the swivel could damage a shaft or bearings. The force of the pull tore the hose almost into two pieces. Mr. Spry testified even if the allision had not occurred, had he ever begun a hitch and seen the swivel in the same condition as it was after the allision (particularly if he knew the swivel had been subjected to a sideways pull), he would not have allowed his crew to work under the swivel until it had been properly inspected by Basic.

Mr. Gardner testified the kelly cock was in a bind, because the kelly hole (which is attached to the swivel on the kelly cock) was pulled by a hose. Superior charged Basic \$42,134.24 to replace damaged parts, reassemble the unit and install and align it on the rig. This price included the entire swivel unit (*i.e.* the swivel, kelly cock, kelly bushing, etc.). Although Mr. Gardner testified a visual

inspection revealed no damage to the kelly, the kelly was sent to the machine shop along with the swivel, because the swivel had to be "bucked off" the kelly cock in order to be inspected. Mr. Gardner testified that when an integral piece of equipment such as the swivel is disassembled in order to check for damage, it is common practice to replace the parts inside, regardless of whether the internal parts were damaged, deteriorated or appeared brand new.

Mr. Harrison testified when he initially saw the swivel and kelly assembly, the kelly hose had the swivel pulled at an extreme angle. Because of that, he wanted to inspect the swivel and kelly further, to see if the kelly was bent. (He thought the kelly was bent, because it was out of alignment with the shuck.) Mr. Harrison also testified the swivel is not designed to take a side load, and that the sideways pull made him concerned there could be a crack in the shaft. The only way to inspect for a crack in the shaft was to open the swivel and magnaflux the shaft. As Rig 14 had a 200 ton swivel, and the derrick is rated for 348, the integrity of the swivel was a great safety concern. If the shaft were cracked, it could break, causing the drill string to drop to the floor. Mr. Harrison testified when a swivel is opened up, as a matter of expediency and practice in the industry, all internal parts are replaced. The only part that perhaps could be reused would be the thrust bearing, which constituted approximately 10 to 12% of the total cost of the swivel. Mr. Harrison testified the top of the swivel needed to be sandblasted to make certain the webbing was intact, but the shaft could have been inspected without magnaflux testing.

Mr. Busse testified if there were a sideways pull by the hose, the weakest point in the structure (with the structure consisting of the gooseneck, a nipple, a hammer union, another nipple, and a hose connection) would be the upper nipple. If there were a sideways pull from the hose, he would not suspect the swivel sustained any damage, because the weakest points are the upper nipple,

the hose⁴⁵, and the straps holding the standpipe to the mast, and so any significant force would have caused one of those weaker items to fail. Accordingly, he allocated \$0 for the swivel. However, on cross, Mr. Busse testified he would consider inspecting the threads on the gooseneck. He disagreed that the stem inside of the swivel needed to be inspected. He stated the stem has the strength to resist horizontal forces. Mr. Busse testified it is recommended that a swivel be torn down and inspected every five years, but based upon the testimony he heard at trial, this swivel had not been inspected in at least fifteen years.

Mr. Trickey testified he would visually inspect everything, including the swivel, and he may have opened up the swivel to inspect it further. [Trickey, pp. 111-112]

The Court agrees the swivel needed to be torn down and inspected due to the allision, which entailed sandblasting the top of the swivel in order to inspect the webbing. Given the photographic evidence showing the tilt to the kelly [*see e.g.* Ex. 42, p.36], the testimony of Mr. Gardner, Mr. Spry and Mr. Harrison, all of whom the Court found to be exceedingly credible, the fact that no one knows the amount of pull exerted on the hose and whether or not the pull exceeded the safety rating, and given the loads this piece of equipment must handle, the Court finds it was reasonable to tear down the swivel so that the shaft could be inspected. To the extent Basic acquired an inspected swivel post-allision, the Court finds that to be “betterment,” which Delta explicitly waived. Thus, the Court awards \$42,134.24 for the swivel.

⁴⁵ Although not abundantly clear, it seems Mr. Busse was referring to the rotary hose.

8. Hook/Block Combination

Mr. Spry testified prior to the allision, the block⁴⁶ was set on the floor of the rig. During the allision, the block was thrown off the floor and was found hanging under the derrick mast.⁴⁷ Furthermore, because the block was found hanging from the mast after the allision, Basic was concerned the shock load had caused damage to the hook/block. After the allision, there was a gap in the block where one could see the spring in the bottom of the block. Mr. Spry had never seen an opening in the block prior to the allision.

Mr. Gardner testified that upon visual inspection, the hook and block combination “was in a bind.” He stated the hook was pulled somewhat out of the block, leaving a gap where the hook was separated from the traveling block, indicating it had been under unusual tension. Mr. Gardner testified the separation was the reason the decision was made to perform additional testing (other than the visual inspection), as the gap is consistent with there being a broken spring in the block. When the hook and block were eventually torn apart, the spring was indeed broken. A broken spring prevents the hook from swivelling. Mr. Gardner testified when an integral piece of equipment, such as the hook and block combination, is disassembled in order to check for damage, the prudent practice is to replace the parts inside, regardless of whether the internal parts were damaged, deteriorated or appeared brand new.

⁴⁶The block was a 200 ton traveling block. Mr. Spry testified when he looked at the block immediately after the allision, it was hanging from the derrick, and the weight indicator showed 167,000 pounds, which indicated to him at some point during the allision, the mast was subjected to 167,000 pounds of pull.

⁴⁷It was Mr. Spry’s opinion that the block hanging from the derrick prevented the derrick from being completely detached from the rig floor during the allision, thus the block underwent tremendous pressure.

Mr. Harrison testified based upon his inspection, he felt the hook and block combination needed to be further examined, due to external marks on the bottom portion of the hook, which indicated the hook had been "knocked around" and had struck something. The block appeared to have been pulled into a bind, up against some square tubing. He further testified in order to inspect the block and hook, they must be torn down. The block and hook must be separated, and the parts of the hook that bear weight must be magnafluxed to insure there are no cracks. He was very concerned because it appeared the hook/block combination had been subjected to a side-load, which it is not designed to take. He was concerned some of the sheaves inside the block had been cracked, as they were not designed to take a side load, and thus it was necessary to magnaflux test those as well. His main concern was where the bracket goes up into the block, as that supports the weight of anything it picks up. In order to inspect the sheaves, they needed to be magnafluxed. Mr. Harrison testified in his opinion, the broken spring was caused by the allision because the metal was shiny, with no rust, and because the gap in the hook/block was not visible until after the allision. Furthermore, had the spring been broken prior to the allision, the swivel would have been difficult to turn, particularly under a load. Mr. Harrison further testified Basic has a maintenance program in place for its barge rigs, and if the hook or block was not functioning properly, the toolpusher was to document that on his morning reports. No problems with the hook or block had been documented by the toolpusher prior to the allision. Mr. Harrison testified the \$17,590.07 charged by Superior was reasonable and fair.

Mr. Busse testified the top of the block appeared to be touching a blue rectangular tube on the back of the base section of the mast post-allision. The rating for the block was 200 tons, and it was able to safely resist 1 million pounds before it got out of the elastic limit. He did not think the

block sustained any damage because the blue tube sustained no damage. As to the break in the spring, Mr. Busse opined that was due to normal, routine fatigue, rather than the allision. He was of the opinion there was no reason to tear down the block and hook as a result of the allision. Mr. Busse testified it is recommended that the hook and block should be inspected every five years, and from the testimony he heard at trial, the hook had not been inspected in at least fifteen years. On cross, Mr. Busse testified although he was at the yard when Superior started opening up the block, he did not stay while they finished. He admitted the only way to determine whether the sheaves, cable grooves, stem and nut within the block housing had been damaged would be to open up the block housing and view them.

Mr. Trickey testified the block did not “look necessarily damaged,” but he did not see the inside of the block, although he “would have expected someone to strip it . . . [and] actually open it up and have a look at it and reach a decision on it,” as that was the “logical thing” to do. [Trickey p.60]

The Court found Mr. Spry’s testimony, that he had seen no gap in the hook/block combination pre-allision, very credible. Both Mr. Spry and Mr. Gardner testified a broken spring could present by way of a gap in the hook/block combination. Due to the foregoing, as well as the testimony of Mr. Harrison that the break in the spring appeared fresh, the amount of weight the hook/block combination must bear, and Mr. Harrison and Mr. Gardner’s testimony about the stem, the Court finds Basic is entitled to its full demand for damages to repair the hook/block combination. Accordingly, Basic is awarded \$17,590.07 for the hook and block combination.

9. Hazardous Cleanup & Disposal

Mr. Harrison and Mr. Gardner testified had Basic chosen to have the original drawworks

repaired and reinstalled, Superior would have had to remove and dispose of the grease, waste oil, etc. contained in the drill floor pan (or sump pit), as Superior would have had to weld from this area.⁴⁸ Mr. Gardner testified had Superior repaired the old drawworks, it would have been welded, rather than bolted down, as it had been welded prior to the allision, and Superior's task was to put the drawworks back in its pre-allision condition. Accordingly, this area had to be cleaned; otherwise, Superior's welder's would have had to lay on their back in the waste material while welding overhead, because once the drawworks were set down on the rig, there was only about a two foot area from which to weld. Had they not cleaned the waste out prior to welding, not only would the welders have had to lie in the waste to weld, the waste would have presented a fire hazard when welding.

Mr. Busse allocated \$0 for hazardous cleanup and disposal. He testified it was not necessary to remove the grease and waste in the drill floor pan, as it was unnecessary for a welder to weld from that area when reinstalling the drawworks. He testified a competent engineer could calculate the forces that would be imposed on the drawworks, and determine the necessary amount of welding of the drawworks. If there were enough weld area available on the outside of the skids, then there would be no need to weld from underneath the drawworks. If there were not a sufficient weld area on the skids, Mr. Busse testified one could merely add bolts and nuts, or run a T-section between the Y-flanges and make a full penetration weld.

On cross, Mr. Busse was asked if he thought it was necessary to remove any of the waste in

⁴⁸However, this work was nevertheless performed (despite the fact the original drawworks were not reused), because the replacement drawworks were heavier than the original drawworks, and Superior had to weld from this area to brace the existing beams to make them stronger. Accordingly, Superior removed the waste from the drill pan, so its crew would not have to work in hazardous, flammable material.

order to do the repair work. He responded that if a weld was coated in “gunk,” one could merely clean the area with a solvent, and then make the weld. Ultimately, however, he conceded that if the original drawworks had been repaired and replaced, the welders would have had to have stood in the “gunk” in order to weld the drawworks back into place. Nevertheless, he maintained there was no reason to remove the waste due to the accident, but admitted it was probably prudent to remove the material while the rig was torn down. Mr. Busse disagreed the welders would have had to have lain down in the waste to do their work, however, Mr. Busse conceded working from that area without it having been cleaned, nonetheless, could pose a slipping hazard. However, he nonetheless maintained \$0 was warranted for waste removal, because one could merely put a nonslip mat down in “the gunk” and weld while standing on the mat. When Mr. Busse was asked if he recalled testifying at his deposition that a portion of the waste material needed to be removed for the crew to safely perform the work, he admitted he had so testified. When asked if it necessarily would cost some monetary amount to remove some amount of material, Mr. Busse conceded some cost would be incurred. Mr. Busse agreed one must have a permit to dispose of the material, but he did not know what kind of permit or what the permit would cost. Again, the Court found Mr. Busse’s testimony unpersuasive.

The Court finds Basic is entitled to recover the \$18,998.27 paid to Superior for hazardous cleanup and disposal. The Court finds had the waste not been removed prior to welding the drawworks, the welders would have had to lie or stand in the waste while welding, presenting a safety hazard. Furthermore, to weld in and about the waste would have presented a fire hazard and significant risk to the men and equipment. The Court found the testimony of Mr. Harrison and Mr. Gardner to be more credible on this issue than the testimony of Mr. Busse, in part because Mr.

Harrison and Mr. Gardner have conducted this type of work for the majority of their careers and do so on a routine basis, whereas Mr. Busse's experience has been primarily focused on "forensic engineering" for the last 25 years and he ignored obvious safety hazards.

10. Drawworks

The day after his initial inspection, Mr. Harrison reported to Ken Huseman (Basic's CEO) that Barge Rig 14 had sustained severe damage. Mr. Huseman contacted Mr. Harrison a few days later and asked Mr. Harrison if rather than repairing the original drawworks, the better course of action might be to look at replacing the drawworks. Mr. Harrison advised he would begin searching for a new or rebuilt drawworks. Mr. Harrison had not received the quote from Superior to repair Rig 14's drawworks at the time of his discussions with Mr. Huseman. In mid-January, Mr. Harrison found a suitable, new drawworks assembly at Bridges Equipment in Midland, Texas. At that time, the drawworks was about 80% complete, and would be ready to ship to Superior in approximately 30 days. Mr. Huseman gave Mr. Harrison approval to order the new drawworks. Mr. Harrison believed installation of the new drawworks would take either the same amount of time, or less time, than it would take to repair the original drawworks. Basic had Superior provide an estimate of the cost to merely repair the damaged drawworks, and that is the amount Basic argues it is owed by Delta for damage to its drawworks.⁴⁹

Mr. Harrison additionally testified he inspected Rigs 14 and 15 at the time Basic purchased them, and there were no problems with the drawworks at the time of purchase. He further testified there were no discussions prior to the allision about making any repairs, changes or modifications

⁴⁹In other words, Basic does not seek damages for the cost of installing the new drawworks compound.

to the drawworks, he had received no reports about problems with the drawworks on Rig 14, and that Rig 15 has the same drawworks set up as Rig 14 (a Wilson Dolphin 65) and it is still operating with that drawworks. He testified the only repairs made to the drawworks on Rig 14 from the time of purchase until the allision was changing out a transmission on the engine compound four to six months after the rig was purchased.⁵⁰ Mr. Harrison testified in his opinion, the amount quoted by Superior (\$401,162.00) was fair and reasonable.

Mr. Gardner testified Superior prepared the quote for repairs to the drawworks after all the drawworks components (*i.e.* the drawworks and rotary skid, drawworks, power exhaust, exhaust insulation, drawworks compound, drawworks power and hydromatic brake) were disassembled. He further testified Superior made an assessment of what it would cost to replace and repair the damaged components, and then put the drawworks back together according to OEM (original equipment manufacturer) specifications. The total estimate for this work was \$401,162.00; the portion of this estimate which Delta disputes totals \$355,120.00.⁵¹ (The estimate does not include the cost of dismantling the drawworks.) Mr. Gardner testified he does not know whether or not the drawworks were at OEM specifications prior to the allision.

a. Drawworks and Rotary Skid

Superior's quote for this portion of the work was \$58,657.00. After the allision, one end of

⁵⁰Mr. Harrison testified Basic has a maintenance program for its barge rigs which includes monthly rig inspections and maintenance schedules.

⁵¹Although the parties' written trial stipulation shows the amount in dispute to be \$355,140.00, that number appears to be in error. The scope of work document submitted by Superior to Basic shows the portion of disputed work totals \$355,120.00. The difference in the two documents is contained in the item designated as "Drawworks Compound"; on Superior's scope of work, the charge is listed as \$57,464, whereas on the stipulation it is listed as \$57,484.00.

one of the two skids upon which the drawworks sit was ripped up from the rig floor and bent. [Doc. 70, Ex. 42, p. 54] Superior welded an I-beam under the grating and skid to prevent it from falling on anyone while they were performing the repairs. Mr. Gardner testified the main damage in this area consisted of certain bent structural members, more specifically, the master skid was bent and there were some broken and bent pieces. The skid was no longer functional. Superior and Mr. Harrison determined the better course was to build a new skid, rather than attempt to repair the existing skid, because in addition to the damage caused by the allision, the skid also had deterioration caused by age, and it would be less costly and less timely to replace the skid than to repair it. Superior's estimate includes fabrication and installation of a new skid, having their draftsmen measure the skid and prepare AutoCAD drawings of the skid, installation of the new skid, and fabrication and installation of new mast shoes and pins (which are attached to the rotary skid). Installation of the new skid would have taken three to four days, as Superior would have to align it back with the compound skid and weld it to the drill floor.

Mr. Harrison testified the drawworks and rotary skid is the skid upon which the drawworks and rotary table sit. When Mr. Harrison examined the drawworks, he saw the skid was bent on both sides, and a section of the drawworks and rotary skid had peeled up during the accident. Mr. Harrison testified had he been repairing the rig, he would not have attempted to repair the skid, because in his opinion it would be more time-consuming and costly to repair it, than to replace it. He further testified one could not merely put the entire skid in a press to press it straight again; rather, pieces would have to have been cut, portions would have to have been heated, and the skid still might not have been straight. Mr. Harrison testified he had attempted to repair skids on four or five occasions on a workover rig frame (which uses a slightly larger I-beam than Rig 14), but was

never successful. Because the derrick on barge Rig 14 is 103 feet tall, if the skid is not perfectly straight, the derrick will be out of place and the box will not hang over the hole. In other words, the rig would not perform its function. The derrick must be perfectly level for the blocks to sit over the hole.⁵² He additionally testified had the skid been brand new prior to the allision (*i.e.* with no rust), he still would have replaced (rather than repaired) the skid, because in his experience, the skid cannot be sufficiently straightened to serve its function. He testified it would be more costly to attempt to repair the skid than to replace it, in part because there are five beams running down the length of the skid, all of which would have to be addressed to ensure they lined up properly. Mr. Harrison testified in his experience, the price quoted by Superior of \$58,657.00 was fair and reasonable.

Mr. Busse testified there was a hole in the rotary skid, and the skid appeared to be badly corroded. He testified any kink in the skid could have been repaired, if the corrosion were ignored. However, due to the corrosion, he agreed it may have been cheaper to fabricate a new skid. He emphasized the corrosion was not allision-related. Mr. Busse calculated the cost of repairing the drawworks and rotary skid at \$8,000. He arrived at that figure as follows: repair of the rotary skid (for allision-related damages only, not for corrosion) using a welder and a fitter at \$65 per hour each for 60 hours, for a total of \$7,800, miscellaneous material at a cost of \$200, and thus, a total of \$8,000.⁵³ Mr. Busse testified in arriving at his estimate, he attempted to reduce the monetary amount by the portion he attributed to age and decay, and include only accident related costs. Other than inquiring as to Superior's hourly rates, Mr. Busse did not ask Superior for an estimate of the work

⁵²Mr. Harrison testified if one end of the skid were 1/4 of an inch bent, it could throw the derrick off by about 10 to 12 inches.

⁵³Mr. Harrison unequivocally testified this portion of the work could not be performed for \$8,000.00.

Mr. Busse thought was appropriate. (Although Mr. Busse did speak with a welder foreman at Davis Ironworks in Waco, Texas about his estimate.)

Mr. Busse testified if he were conducting the repairs, he would have removed the damaged area and replaced it with a new plate. Any straightening that needed to be done to the skid could be done while it was being repaired. He testified while the skid was being repaired, it could be put in a jig, and when replacing the damaged piece, the workers could correct any bend and then weld it all back together. As to the kink in the skid [see Ex. 40, p.12], Mr. Busse's opinion was that it could have been corrected without addressing the additional beams contained in the skid. Mr. Busse disagreed with Mr. Harrison's testimony about the importance of the skid being almost perfectly aligned, testifying the effect was not as pronounced as Mr. Harrison testified. He agreed due to the corrosion on the skid, it may have been necessary to replace the skid, but disagreed with Mr. Harrison and Mr. Gardner that it was easier to replace the skid than to repair it. On cross, Mr. Busse admitted if the skid was not sufficiently straight, Basic would run the risk of misalignment with whatever is being dropped out of the top of the derrick. Mr. Busse did not speak to anyone at Superior about what work was actually included in the estimate for this portion of the repair work. He did not view or inspect the drawworks skid after the drawworks had been removed and he did not otherwise provide adequate support for his opinion.

The Court found Mr. Busse's testimony as to the manner in which he would have repaired the skid to be less than credible or persuasive and found that of Mr. Harrison and Mr. Gardner exceedingly credible and persuasive. Because in this matter Delta, the tortfeasor, was presented with a skid that was so badly corroded that even Delta's expert testified it was likely cheaper to fabricate a new skid than repair the preexisting skid, the court finds it was not feasible to repair the skid, and

thus, it was reasonable for Superior to build a new drawworks and rotary skid. The fact that Basic ultimately acquired a newer, better skid is clearly “betterment,” but, again, Delta has waived its right to seek a reduction on that basis. Accordingly, Basic is awarded \$58,657.00 for replacement of the drawworks and rotary skid.

b. Drawworks Components

Superior’s quote for this portion of the work was \$238,999.00. This portion of Superior’s scope of work included repairs to the console, guards, clutch, drawworks skid, and waterbox. It additionally included replacing the chain, re-assembling the drawworks, furnishing and installation of various fluids, and installation of the drawworks on the main skid (which would include alignment of the end slide rotary countershaft, the hydromatic brake, and the guards and chain with the compound and console). Mr. Gardner testified approximately \$10,000 of the \$238,999 estimate constituted the cost of repair due to deterioration damage.

Mr. Busse testified in his inspection of the drawworks, he determined the chain guards, safety guards, the chain and a sprocket sustained damage. When examined about how he arrived at his estimate of \$134,616.00 to repair this portion of the damage to the drawworks⁵⁴, he admitted he did not fully understand all of the work Superior had included for these items.⁵⁵ (In fact, Mr. Busse had made a note to himself with regard to Superior’s estimate that says “has to be more work than listed to get this high.”) Mr. Busse later discovered Superior’s estimate included pneumatic pipe, and based upon that recognition, he later assumed 8 hours per day (although he testified 8 hours per day “is just

⁵⁴See Joint Stipulation No. 2, p.4, no. 4, parts a through i; *see also* Trial Stip. Phase II, p.5.

⁵⁵Mr. Busse admitted upon questioning by the Court that he only used the words contained in the scope of work documents to determine his estimates, despite the fact he attended Mr. Gardner’s deposition where the work performed was discussed in more detail.

a number I use and apparently they [Superior] use 12"), \$65 per hour, 8 men, 25 days for repairs⁵⁶, for a total of \$134,660.00.⁵⁷ Mr. Busse did not speak to anyone at Superior about their estimate, or what it included.⁵⁸ Mr. Busse testified to put the equipment back on the barge, one would need a crew, a crane and slings. He did not know the hourly rate for the crane or the crane operator, nor did he calculate the number of hours the crane would be required. Again, the Court found his testimony to be without adequate foundational support and unpersuasive.

i. Console

Mr. Harrison testified when he inspected the rig, some of the hoses, wiring and hydraulic lines had ripped from underneath the console. He explained underneath the console is an I-beam, which most of the hoses, wires and lines cross. When the driller's shack and console were pulled during the allision, the wires, hoses and lines were ripped where they cross the sharp edge of the I-beam. Additionally, a portion of the A-frame had pushed the driller's shed, which tilted the console over, causing light damage to the frame. However, the hoses sustained the bulk of the damage to the console.

Mr. Busse testified he found no damage to the frame of the console. However, he testified his estimate allows for replacing any wires or hoses that were severed in the allision.

⁵⁶He further testified his 25 day time frame included every item of work found on joint stipulation 2, p.4. He qualified the 25 days began after the equipment was removed from the barge, and did not include putting the equipment back on the barge.

⁵⁷The Court recognizes these numbers total only \$104,000. It is unclear to the Court how Mr. Busse calculated the remaining portion of the \$134,616 (although he did state the chain should cost \$2,000). However, at trial, he testified he had made an arithmetic mistake, and his estimate should actually be for \$132,660.

⁵⁸He stated he "tried to contact Andy Gardner, and he never returned my phone call."

ii. Guards

Mr. Spry testified after the allision, he saw that the knee guard (which covers the drawworks drum) was bent and missing its bolts. He additionally testified the guard covering the low drum clutch was bent, and the guard for the high drum clutch was crushed. Mr. Gardner testified the damage to the drawworks guards was due both to the allision and deterioration. However, with respect to the chain guards, the damage was due solely to the allision. Specifically, Mr. Gardner testified when the drawworks was “bent up” during the allision, the chain guard “was cratered.” Of all the drawworks guards, Mr. Gardner testified the chain guard is the most complicated to repair in terms of time, cost and labor. He further testified the chain guards make up approximately half of all of the drawworks guards.

Mr. Harrison testified the main drawworks guard (*i.e.* the guard that goes from the compound to the side of the drawworks where the main drum clutch is located) was crushed during the allision and sustained the worst damage. The clutch guard sustained minor damage. Both chain guards (*i.e.* the one on the drawworks side and the one on the compound side) were damaged, but the worst damage was to the chain guard on the drawworks side. Mr. Harrison testified the chain guard on the drawworks side was cracked in several places [*see* Ex. 39, p.6], because when the rig hit the bridge, the rotary skid bent up, crushing one side of the chain guard, and pulling the guard into the drum shaft, causing it to crack. Mr. Harrison testified the chain guards are not easy to repair, because Wilson does not use a mechanical seal between the guard and clutch, but instead uses a “louvered seal.” Because it is a louvered seal, the chain guards (which are heavier than the brake guards and the clutch guards) must be in perfect condition to prevent the oil in the chain guard from leaking onto the clutch. If oil gets on the clutch, the clutch will not work properly. Accordingly, he chose to

replace the damaged chain guard, rather than attempt to repair it, as he felt replacement would be more efficient in terms of time and money.

Mr. Busse testified the guards could have been repaired, and he included \$1,000.00 in his estimate for this item of repair. He testified the “personnel guard” needed very little repair, but the chain guard required a bit more work. However, all guards were repairable and none needed to be replaced. Mr. Busse disagreed with Mr. Harrison’s testimony that due to the louvered seals, it is less costly and less time consuming to replace, rather than repair the chain guards. Again, the Court found Mr. Harrison’s testimony to be better supported and more persuasive than Mr. Busse’s.

iii. Clutch

Mr. Harrison testified the only damage he saw to the clutches was to the main drum clutch. Specifically, one of the sprockets behind the clutch was broken, one of the steel plates was cracked and broken, and one of the fiber plates was cracked and broken. Mr. Harrison testified the crack in the steel plate appeared fresh, as there was no rust.

Mr. Busse testified he inspected “what he could see” of the clutches, but did not see any damage. He did not see the clutches after they had been opened up. Mr. Busse assumed because there was no significant damage on the guards, the clutches sustained no damage.

iv. Drawworks Skid⁵⁹

Mr. Gardner testified the damage to the drawworks skid was due both to the allision and to age-related deterioration.

When Mr. Harrison inspected the rig, he saw the master skid (which sits underneath the drawworks skid) was warped on the driller’s side, testifying “It was completely stripped down when

⁵⁹Mr. Harrison would sometimes refer to this item as the drawworks frame.

I got up here all the drum was off and it was completely stripped down and it was tweaked off from the off driller side the drum clutch side it was tweaked it was warped.” The front corner was twisted and warped from the left bottom corner up to the top right corner. The twisting Mr. Harrison saw was consistent with the manner in which he understood the accident to have occurred.

Mr. Busse testified he saw no damage to the drawworks skid.

v. Waterbox⁶⁰

Mr. Gardner testified the top of the waterbox tank was caved in, due to the mast having pushed down on it. Mr. Harrison testified when he inspected the rig, he could not see any actual damage to the waterbox, but he did see a piece of tubing had been pushed over onto the waterbox. Because the tubing had hit the waterbox, Mr. Harrison determined the waterbox should be opened up and inspected, as the waterbox contains carbon seals which are very brittle. Mr. Harrison was concerned, because if the box was hit hard enough, the carbon seals may have broken. After the waterbox was torn down, Mr. Harrison was advised the carbon seals inside the waterbox had indeed broken.

Mr. Busse testified he found no damage to the waterbox. He further testified the term “waterbox” was not familiar to him, but he assumed it was the union or member that furnishes water to the drawworks. He did not make any further inquiry in order to determine whether or not his assumption with regard to the “waterbox” was correct. Mr. Busse allocated \$0 for the waterbox, as he saw no damage to what he thought was the waterbox guard, and thus assumed the waterbox itself,

⁶⁰Per Mr. Harrison, the waterbox is a box on the end of the drum shaft. The drum shaft is hollow, and the waterbox is a connection where two waterlines attach and circulate water through the waterbox, into the shaft of the drum, and then hoses transport the water to the drum flanges themselves to cool the flanges.

had sustained no damage. He did not see the waterbox after it had been torn down. Mr. Busse conceded that if the waterbox had not leaked prior to the allision, and post-allision it was opened up and broken seals were found, that might be an indication that the waterbox was damaged during the allision.

vi. Chain

Mr. Gardner testified if a chain has a broken link, Superior always changes the entire chain. Mr. Harrison testified at his initial inspection, he saw a broken chain between the compound and the drawworks. He further testified he would not attempt to repair the chain, because if the allision caused enough stress to the chain to break one of the 300 to 400 pitches (or links), all the other pitches had likely been stressed as well. Under such circumstances (*i.e.* where a chain has been strained to the extent it causes the chain to break), Mr. Harrison testified he felt the prudent course of action was to replace the chain.

Mr. Busse testified although he saw the chains, he did not inspect them to determine whether or not they had broken. However, he was told the chains had broken. Mr. Busse further testified although he did not know which chains were broken, he made an allowance for the chains in his estimate. Mr. Busse further testified with regard to drawworks hoisting chains, API recommends if such a chain breaks on three different occasions while under use, it should be replaced; if it breaks less than three times, it should be inspected, any damaged parts should be replaced, and then the chain should be reinstalled. Under the facts of this matter, Mr. Busse was of the opinion the chain should have merely been inspected, repaired and reinstalled, and he allowed \$2000.00 for this portion of the work.

The Court found Mr. Gardner's testimony as to the prudent course of action when dealing

with such a pivotal chain to be much more persuasive than Mr. Busse's general assumption and opinion.

vii. Reassembly & Reinstallation of repaired drawworks

Mr. Gardner estimated it would have taken approximately three weeks to reassemble the original drawworks, and three or four days to reinstall the drawworks onto the rig. Mr. Harrison testified in great detail as to how the process of reassembling and reinstalling the original, repaired drawworks would have occurred. It is an extensive and time-consuming process, which must be performed in an exact and precise manner. Mr. Harrison testified after all drawworks parts were torn down and the frame was rebuilt (which would take some time), in his opinion it would take two to three weeks to reassemble and reinstall the drawworks back onto the rig. Upon cross-examination, Mr. Harrison testified one could weld the outside edge of the drawworks, where it crossed the top of the frame, without welding from the sump pit. However, no calculation was made as to the amount of weld necessary to hold down the drawworks. Thus, the record does not show whether or not merely welding the outside edge of the drawworks would have been sufficient to hold down the drawworks. Mr. Harrison additionally testified of all the drawworks he had ever mounted, welds were made across the tops of the beams, as well as underneath the beams. When asked if one could merely put bolts through the frame members of the drawworks, and then install the bolts after the drawworks was on the rig (and thus alleviate the need to work in the sump pit), Mr. Harrison responded that is an option, but he had never installed a drawworks in that manner. He further testified he had installed 70 or 80 drawworks on new rigs, and he had always welded them from underneath.

Mr. Busse merely estimated, without adequate foundation, six days was a reasonable amount

of time to reassemble the drawworks. He did not speak to anyone at Superior about the labor Superior included, or about any other aspect of their estimate. At trial, he testified he did not know whether or not Superior's estimate included repair and reassembly, or merely reassembly. Mr. Busse's estimate of six days included reassembly only. Mr. Busse additionally estimated it would take six days to put the drawworks back on the barge and realign it.⁶¹ Mr. Busse testified even if the work was performed as described by Superior, it should still have taken only six days, as he had "done a lot more than that in 72 hours."⁶²

Overall, the Court found the testimony of Mr. Gardner as to the manner and method of repair to be reasonable and credible. The Court additionally found Mr. Harrison to be very credible, and that he has the background and experience necessary to judge the reasonableness of the charges. Mr. Harrison testified Superior's charges for repair of the drawworks components were reasonable, and the Court accepts his testimony as credible. Overall, the Court did not find the testimony of Mr. Busse to be credible, in part due to the numerous erroneous assumptions upon which he relied, his flawed and absent methodology, and because his monetary estimates do not have the precision required to be of any benefit to the court. Accordingly, Basic is awarded \$238,999.00 for the damages to the drawworks components.

c. Drawworks Compound

Mr. Spry testified the area of the drawworks compound where the chains run and the drum and one of the clutches is located was crushed, due to its being ripped from the floor at a 45 degree

⁶¹The six days is in addition to the 25 days Mr. Busse believed it would take to perform all the other work found on p.4 of Joint Stipulation 2.

⁶²From his testimony, it appears Mr. Busse had not installed drawworks on a rig in at least 25 years.

angle. [*See e.g.* Ex. 38, p.43] He additionally testified the sprocket for the chain compound chain was bent.

Mr. Gardner testified these repairs included repairs to skid no. 2, due to damages sustained from the headache rack bending the skid. Mr. Gardner testified the headache rack connections on the back of drawworks compound skid no. 2 were damaged, and the headache rack was damaged due to being pulled over. The allision caused a beam in skid no. 2 to bend. Skid no. 2 was damaged due to the allision and deterioration. Skid no. 1 was not damaged, and would not have had to have been replaced, had Basic chosen to merely repair the existing drawworks; Superior's estimate does not include the cost of repairing or replacing skid no. 1, as it was not damaged in the allision.

Mr. Harrison testified the drawworks compound sits on the compound skids (a.k.a. "engine skids"). When he inspected the rig, he saw damage to the drawworks guard and compound guard. His main concern was whether there was damage on the inside of the compound shafts caused by the chain breaking off. In order to determine whether or not the compound shaft was damaged, the compound shafts had to be pulled out of the compound, torn down, and inspected. Additionally, the number 2 engine skid was damaged, due to the headache rack's coming in contact with the bridge, which then pulled the no. 2 engine skid. The allision caused the webbing to be pulled out of the I-beam. To repair the I-beam, the equipment needed to be removed in order to weld in the area. Mr. Harrison further testified if he were doing the repairs, he would have changed out the I-beam because of the damage it withstood when the headache rack was pushed over. He further testified as to the extensive amount of labor (and the precision with which it must be performed) involved in assembling and reinstalling the compound. Mr. Harrison testified in his experience and opinion, the amount invoiced by Superior for this item of damages was fair and reasonable, and he unequivocally

disagreed with Mr. Busse's opinion that this portion of work could be completed for \$10,000.00.

Mr. Busse originally testified the cost of repair to the drawworks compound should have been \$10,360.00, but at trial, realized he had made a mathematical error and reduced his estimate to \$7,180.00. The only allision-related damage he saw was to two places where the shoes were pulled over on the compound skid. In his opinion, the skid could have been repaired without removing the engine. His estimate included the following: \$1,000 to replace parts due to allision-related damage⁶³; \$1,300 for repair to compound skid no. 2 (which includes a two man crew, each paid \$65 per hour for 10 hours); the remainder of his estimate covered those items contained in part "d" of Superior's scope of work⁶⁴, despite the fact Mr. Busse felt this portion of the work was unnecessary.⁶⁵ Mr. Busse additionally testified he felt Superior's scope of work included some duplication, however he did not speak with anyone at Superior about what was included in this portion of the work. Mr. Busse inspected the compound skid with the equipment on it; he did not inspect it after the equipment was removed, as he felt that was unnecessary because he knew the damage came from the mast support, so there was "no sense looking any further."

The Court finds, based upon the testimony (particularly of Mr. Harrison regarding the labor involved) and the photographic evidence at trial to be persuasive and credible, and the testimony of Mr. Busse to be neither. Therefore, Basic is awarded \$57,464.00 for repairs to the drawworks

⁶³However, Mr. Busse qualified that although he did not see any parts that needed to be replaced, he estimated \$1,000 because he "just felt [he] might have missed something, so I just gave them a thousand dollars, if you will."

⁶⁴Part "d" states: "SDS to assemble, install on skid, align to the drawworks, install and align engines to compound, install on rig, run, and test."

⁶⁵Mr. Busse calculated a two man crew at \$65 per hour, for an 8 hour day for the labor involved in part "d".

compound. To the extent betterment occurred, that argument was explicitly waived at trial by Delta.

Taking into account the \$200,454.43 agreed to by all parties as owed for certain property damage, plus this Court's determination of the amount owed for those areas of repair in dispute, the total amount of repairs, as determined by the Court, is \$918,445.18. However, the parties have stipulated that should this Court find Delta is entitled to limitation of liability, the value of Delta's vessels and pending freight is \$866,494.00. [Doc. 34, p.7] Thus, the Court finds Delta is liable to Basic in the amount of \$866,494.00 for property damages sustained by the Barge Rig 14.

B. Detention Damages

The parties stipulated at trial that "Basic's daily loss for those days for which it is entitled to loss of use is \$3,892."⁶⁶ [Doc. 60, p.5] Basic claims' it is entitled to loss of use damages for 124 days.⁶⁷ Delta argued any award of detention damages should be limited to 42 days. [Doc. 37, p.5]

The testimony and evidence at trial convinced this Court the repairs to Barge Rig 14 were conducted in a reasonable amount of time⁶⁸, there was an active market during the time Barge Rig 14 was under repair, and Basic had customers who preferred Barge Rig 14 over Basic's other rigs, in large part due to Barge Rig 14's crew and safety record. [See e.g. Spry, 9-13-10] Accordingly, the Court finds loss of use is owed. However, at this juncture, the Court need not make particularized

⁶⁶After hearing the testimony at trial of Mr. McGuire, and how he arrived at the \$3,892 figure, the Court agrees with Basic that this is a conservative estimate of the average daily profit for Rig 14.

⁶⁷Mr. Harrison testified the 124 days does not include the final two week period the rig was in Superior's yard, because during that final two week period, Basic was waiting for a set of raising ramps to arrive, which had been repaired at Basic's Fort Worth facility. Mr. Harrison testified the repairs to the raising ramps had no relation to the allision, and therefore Basic did not include that time period in its calculation for detention damages.

⁶⁸The Court additionally found Mr. Gardner's testimony that it was faster to install the new drawworks than it would have been to repair the old drawworks to be credible.

findings as to the exact number of days for which detention damages are owed, because the monetary amount of damages the Court has previously determined is owed by Delta to Basic is already in excess of the recoverable amount within the limit of liability. Consequently, any additional damages awarded are barred by the application of the limitation of liability statute, 46 U.S.C. § 30505(a), and cannot be awarded by this Court.

C. Prejudgment interest.

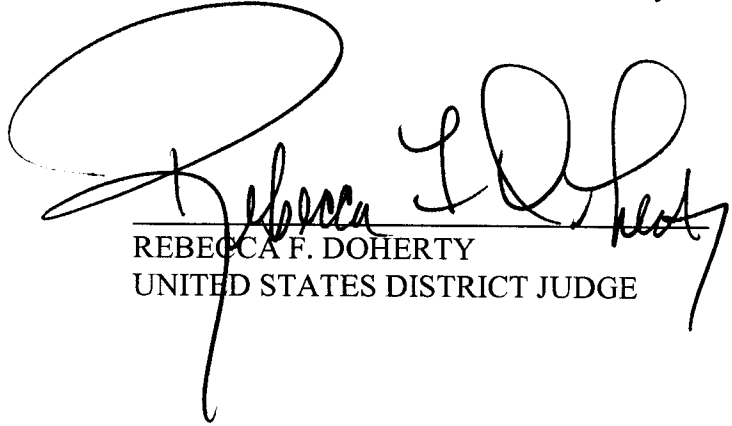
“[I]n maritime cases the award of prejudgment interest is the rule, rather than the exception, and the trial court has discretion to deny prejudgment interest only where peculiar circumstances would make such an award inequitable.” *Corpus Christi Oil & Gas Co. v. Zapata Gulf Marine Corp.*, 71 F.3d 198, 204 (5th Cir.1995); *see also City of Milwaukee v. Cement Div., Nat'l Gypsum Co.*, 515 U.S. 189 (1995) (“By compensating for the loss of use of money due as damages from the time the claim accrues until judgment is entered, an award of prejudgment interest helps achieve the goal of restoring a party to the condition it enjoyed before the injury occurred”)(quotation marks and citations omitted). Accordingly, Basic is awarded prejudgment interest from the date of the accident (January 3, 2008) to the date of reimbursement. *See e.g. Ryan Walsh Stevedoring Co. v. James Marine Services, Inc.*, 792 F.2d 489 (5th Cir. 1986)(“prejudgment interest on repair costs runs from the date of the accident even though the owner does not pay these costs until some later date”).

VI. Conclusion

In light of the foregoing, Basic is awarded \$866,494.00 (the maximum liability available), plus prejudgment interest from the date of loss, January 3, 2008, at the rate current established by 28 U.S.C. § 1961.

The parties are hereby ORDERED to submit a final judgment, approved as to form, within fifteen (15) days of receipt of this Ruling.

THUS DONE AND SIGNED in Chambers, Lafayette, Louisiana, this 12 day of January, 2011.



REBECCA F. DOHERTY
UNITED STATES DISTRICT JUDGE